

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Terry G. Young	§	Attorney Docket No.:	Safoco-1-2
Serial No.:	To Be Assigned	§		
Filed:	Herewith	§	Anticipated Art Unit No.:	3753
For:	<i>Valve Actuator Apparatus and Method</i>	§		

**PRELIMINARY AMENDMENT**

Box Patent Application  
Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

Kindly amend the above-identified application as follows:

**In the Specification**

On page 1, please amend the title as follows:

Clean Version of Amended Title

VALVE ACTUATOR APPARATUS

On page 1, below the title, please add the following heading and paragraph:

Clean Version of Added Paragraph

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation of U.S. Application Serial No. 09/538,882, filed on March 30, 2001, which is a continuation of U.S. Application Serial No. 08/968,904, filed on November 6, 1997, and now U.S. Patent No. 6,089,531, issuing July 18, 2000, which is a continuation of U.S. Application Serial No. 08/206,424, filed on March 4, 1994, and now abandoned.

**In the Claims**

Please cancel Claims 1-20.

Please add the following new claims, 21-23:

21. **(New)** A valve actuator for moving a valve gate between open and closed valve positions within a valve body, said valve actuator comprising:

an operator assembly including:

(a) an operator housing defining a pressure chamber therein and having a fluid entry port; and

(b) an operator member within said operator housing movable toward said valve body in response to pressurized fluid introduced into said operator housing pressure chamber through said fluid entry port; and

a bonnet assembly including:

(a) a bonnet housing securable to said valve body, said bonnet housing having a bonnet housing bore therethrough;

(b) an elongated bonnet stem having first and second ends, said stem being axially movable in said bonnet housing bore, unconnected at said first end to said operator member and securable at said second end to said valve gate for moving said valve gate to said open and closed valve positions;

(c) a spring for producing a biasing force opposing axial movement of said operator member toward said valve body;

(d) a contact member, separate from said operator member, having an outer flange, and rotatably and axially affixed to said first end of said bonnet stem, and having a surface facing said operator member for drive contact with said operator member;

(e) an upper spring retainer coaxially surrounding said bonnet stem and having an inner flange for engagement with said outer flange to transmit said biasing force to said bonnet stem and to receive said movement of said operator member toward said valve body;

(f) a lower spring retainer coaxially surrounding said bonnet housing; and

(g) securing means for longitudinally securing said operator housing to said bonnet housing, said securing means permitting removal of said operator assembly from said bonnet assembly leaving the bonnet assembly intact to hold said valve closed when said operator assembly is removed.

22. **(New)** A valve actuator for moving a valve gate between open and closed valve positions within a valve body, said valve actuator comprising:

an operator assembly including:

(a) an operator housing defining a pressure chamber therein and having a fluid entry port; and

(b) an operator member within said operator housing movable toward said valve body in response to pressurized fluid introduced into said operator housing pressure chamber through said fluid entry port; and

a bonnet assembly including:

(a) a bonnet housing securable to said valve body, said bonnet housing having a bonnet housing bore therethrough;

(b) an elongated bonnet stem having first and second ends, said stem being axially movable in said bonnet housing bore, unconnected at said first end to said operator member and securable at said second end to said valve gate for moving said valve gate to said open and closed valve positions;

(c) a spring for producing a biasing force opposing axial movement of said operator member toward said valve body;

(d) a contact member, separate from said operator member, having an outer flange,

and rotatably and axially affixed to said first end of said bonnet stem, and having a surface facing said operator member for drive contact with said operator member, said contact member having formations engageable by a tool to effect rotation of said contact member;

(e) an upper spring retainer coaxially surrounding said bonnet stem and having an inner flange for engagement with said outer flange to transmit said biasing force to said bonnet stem and to receive said movement of said operator member toward said valve body;

(f) a lower spring retainer coaxially surrounding said bonnet housing; and

(g) securing means for longitudinally securing said operator housing to said bonnet housing, said securing means permitting removal of said operator assembly from said bonnet assembly leaving the bonnet assembly intact to hold said valve closed when said operator assembly is removed.

23. **(New)** A hydraulic valve actuator for moving a valve gate between open and closed valve positions within a valve body, said valve actuator comprising:

a hydraulic operator assembly including:

(a) an operator housing defining a hydraulic pressure chamber therein and having a liquid entry port; and

(b) a hydraulic piston member within said hydraulic operator housing movable toward said valve body in response to pressurized liquid introduced into said hydraulic operator housing pressure chamber through said liquid entry port;

a bonnet assembly including:

(a) a bonnet housing securable to said valve body, said bonnet housing having a bonnet housing bore therethrough;

(b) an elongated bonnet stem having first and second ends, said stem being axially

movable in said bonnet housing bore, unconnected at said first end to said hydraulic piston member and securable at said second end to said valve gate for moving said valve gate to said open and closed valve positions;

(c) a spring for producing a biasing force opposing axial movement of said hydraulic piston member toward said valve body;

(d) a contact member, separate from said hydraulic piston member, and rotatably and axially affixed to said first end of said bonnet stem, and having a surface facing said hydraulic piston member for drive contact with said hydraulic piston member;

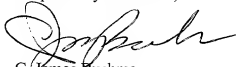
(e) an upper spring retainer, separate from said hydraulic piston member, coaxially surrounding said bonnet stem and operative with said contact member to transmit said biasing force to said bonnet stem and to receive said movement of said hydraulic piston member toward said valve body;

(f) securing means for longitudinally securing said hydraulic operator housing to said bonnet housing; and

(g) a lower spring retainer coaxially surrounding said bonnet housing;

(h) said hydraulic operator assembly being removable intact from said bonnet assembly, leaving said bonnet assembly intact to hold said valve closed when said hydraulic operator assembly is removed.

Respectfully submitted,



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**CERTIFICATE OF EXPRESS MAILING**

I, Jan C. Lipscomb, hereby certify that this correspondence and all referenced enclosures are being deposited by me with the United States Postal Service as Express Mail with Receipt No. EL010849437US in an envelope addressed to Box Patent Application, Assistant Commissioner for Patents, Washington, DC 20231, on June 22, 2001.

By: Jan C. Lipscomb

Version with Markings to Show Changes Made

**In the Specification**

On page 1, please amend the title as follows:

VALVE ACTUATOR APPARATUS [AND METHOD]

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